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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/511,624

10/18/2004

Idriss El Hafidi

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04/27/2006

DISCOVISION ASSOCIATES  
INTELLECTUAL PROPERTY DEVELOPMENT  
2355 MAIN STREET, SUITE 200  
IRVINE, CA 92614

EXAMINER

ASSAF, FAYEZ G

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 04/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/511,624

Applicant(s)

EL HAFIDI ET AL.

Examiner

Fayez G. Assaf

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) 8-24, 28-30 and 39-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 25, 31-38, 47, 48, 50-56 and 59-61 is/are rejected.
- 7) ☒ Claim(s) 26, 27, 49, 57 and 58 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election of Species 2: claims 1-7, 25-38 and 47-61 in the reply filed on 02/17/2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election **without** traverse (MPEP § 818.03(a)). Additionally, claims 28-30 depend upon withdrawn independent claims not pertaining to the elected species. Accordingly, claims 8-24, 28-30, 39-46 have been withdrawn.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 1-5, 32-36, 47, 48, 50 and 51 are rejected under 35 U.S.C. 102(e) as being anticipated by Horimai (US 2003/0063342 A1).

Horimai discloses an apparatus comprising: a first diffractive holographic data storage device having a first set of reflective multiplexed holograms stored thereon (first 224 of Fig. 45); a second diffractive holographic data storage device having a second set of reflective multiplexed holograms stored thereon (second 224 of Fig. 45); and an opaque layer disposed between and attached to one side of the first and second diffractive holographic data storage devices (221 of Fig. 45).

Claims 7, 25, 31, 32, 38, 52-56, 59 and 60 are rejected under 35 U.S.C. 102(b) as being anticipated by Bahns (US 5,946,286).

Bahns discloses an apparatus comprising: a reflective diffractive holographic data storage device having a first set of holograms stored thereon (upper grating of Fig. 2); and a transmissive diffractive holographic data storage device having a second set of holograms stored thereon (44 of Fig. 2), the transmissive and reflective diffractive holographic data storage devices being attached together

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It is noted that the reflective grating is reflective with regard to the R2 beam and the transmissive grating is transmissive with regard to the R1 beam (line 40 to line 55 of Col. 7).

Regarding claim 59, Bahns discloses the first and second holographic units each comprising at least two layers, the first layer comprising a thin film of holographic recording material and the second layer comprising a substrate (see Fig. 17).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horimai.

Claims 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bahns.

Horimai or Bahns disclose the claimed invention except for the organic material being a polypeptide.

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However, The selection of a known material based on its suitability for its intended use supports a prima facie obviousness determination.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize polypeptide holograms, since it have been held to be within the ordinary skill of worker in the art to select a known material on the basis of its suitability for the intended use. One would have been motivated to use such material so as to write the holograms in a time efficient manner and achieve high diffraction efficiency.

Sinclair & Carroll Co. v. Interchemical Corp., 325 U.S. 327, 65 USPQ 297 (1945)

***Allowable Subject Matter***

Claims 26, 27, 49, 57 and 58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 26, 27, 57 and 58 are allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest the reference beam being directed to the first front surface to generate the reflective hologram

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reflectively diffracted from the first surface, and the transmissive/second hologram being transmitted through the second holographic unit and emitted out of the second back surface as set forth in the claimed combination.

Claim 49 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest the second read beam being a portion of the first read beam as set forth in the claimed combination.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fayez G. Assaf whose telephone number is (571) 272-2307. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

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information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Fayez G. Assaf  
Primary Examiner  
Art Unit 2872

4/25/2006